

WHAT IS CLAIMED IS:

1. An image forming optical system comprising, in order from an object side, a first lens which is positive meniscus lens having a convex surface directed toward an object side, an aperture stop, a second lens which is meniscus lens having a convex surface directed toward an image side, a third lens which is positive meniscus lens having a convex surface directed toward the image side, and a fourth lens which is negative lens.

2. An image forming optical system according to claim 1, wherein at least one of surfaces of the fourth lens is aspherical and the following condition is satisfied:

$$-2.0 < \phi_m / \phi_p < 0$$

where ϕ_m represents the power of the fourth lens at the position of the maximum light height and ϕ_p represents the power of the fourth lens at the position of the praxis. Here, the power ϕ_m of the lens at the position with the maximum light height is defined as follows. It is given by $\phi_m = \tan \xi / H_m$, when a parallel light is entered to the maximum light height H_m of the lens to be an object from the infinite point of the object side, and an inclined angle after passing through the lens is ξ .

3. An image forming optical system according to claim 1, wherein the third lens and the fourth lens are composed of plastic material and the following condition is satisfied:

$$15.0 < \nu_3 - \nu_4 < 40.0$$

where ν_3 represents Abbe's number of the third lens and ν_4 represents Abbe's number of the fourth lens.

4. An image forming optical system according to claim 1, satisfying the following condition:

$$0.1 < r_{1f}/f < 2.0$$

where r_{1f} represents a radius of curvature at the object side of the first lens, and f represents a focal length of the whole optical system.

5. An image forming optical system according to claim 1, satisfying the following conditions:

$$0.5 < f_{123}/|f_4| < 3.0$$

$$1.0 < f/|f_4| < 5.0$$

where f_{123} represents a composite focal length of the first lens, the second lens and the third lens, and f represents a focal length of the whole optical system.

6. An image forming optical system according to claim 1, satisfying the following condition:

$$0 < f_1/f_{234} < 3.0$$

where f_1 represents a focal length of the first lens, and f_{234} represents a composite focal length of the second lens, the third lens and the fourth lens.

7. An image forming optical system according to claim 1, satisfying the following condition:

$$0.4 < EXP/f < 2.0$$

where EXP represents a distance of an exit pupil from an image

surface and f is a focal length of the whole image forming optical system.

8. An image forming optical system according to claim 1, satisfying the following condition:

$$0.40 [1/\mu\text{m}] < F_{\text{no}}/P [\mu\text{m}] < 2.20 [1/\mu\text{m}]$$

where F_{no} represents a fully opened F number of the image forming optical system, and P represents a pixel interval of an imaging element arranged at the image side of the fourth lens.

9. An image forming optical system according to claim 1, satisfying the following condition:

$$0.45 < \text{ML}/\text{TL} < 0.100$$

where TL represents a total length of the image forming optical system and ML represents the minimum thickness on the axis of a plastic lens composing the image forming optical system.

10. An electronic apparatus equipped with the image forming optical system according to claim 1.